GET STARTED
AS AN HDL PARTNER

Start your Energy Journey with HDL

Look towards a smarter future and join homeowners who have long benefited from HDL Total Energy Management Solutions.

Enjoy a greener, smarter and greater saving life, with advanced features, long-term warranties, and installers around the world.

Follow us

HDL QA Automation

Website : www.hdl.qa

E-mail : info@hdl.qa

HDL QA

Innovative Energy Management Solutions

Smart Home Solar Solutions Start Here

Who we are?

HDL QA is the official and exclusive distributor of HDL products in Qatar and which are available through our network of HDL approved installers. HDL was established in 1985 and today has a global presence with products available in 80+ countries and in all continents. A number of prestigious International projects have been completed using HDL products. Some examples include all of the DMX nodes and SMS gateway at BMW World in Munich, and the lighting system at the Great Hall of the People in Beijing (Chinese Parliament).

Through our compulsory training and accreditation courses, we assess all installers and pride ourselves for the highest levels of customer support, workmanship and after sales service from every professional that participates. In addition to the above we record the serial number of every product sold by us so that we can ensure traceability should any issue arise.

In order to continually innovate and further specialize the product range we operate a local technical department who collaborate with the R&D department at the headquarters on a continual basis.

HDL QA

1985	150+	106+	500,000+
Founded	R&D Team	Countries	Completed Projects

1000W
Audio-visual Entertainment

500W
Safety and Security

5000W
HVAC Control

4500W
Home Appliance Control

100W
Shading and Drying

100W
Smart Interaction

500W
Smart Lighting

On Pro

What Sets HDL Energy Solutions Apart?

Smart

- Hybrid Energy Storage: Solar surplus rerouted, cutting battery expenses.
- Smart Home Integration: Optimizes every kWh for efficient usage.
- Real-Time Price Management: Automates charging to slash bills, and maximize profit.
- Power Guardian: Guarantees uninterrupted power during blackouts.

Safe

- DC Arc Protection
- Leakage Protection
- SunSpec Rapid Shutdown
- Insulation Monitoring, and 24/7 Real-time Monitoring

HDL On Pro App

Effortlessly realize energy management of your home.

- Real-time monitoring and managing your power anywhere in the world.

Hybrid Inverter

Unmatched 97.6% DC to AC Conversion Efficiency.

Battery Unit

5kWh LFP battery pack, maximum battery capacity of 90kwh per system (by working with power guardian).

Power Guardian

Flexible control of your energy distribution, ensuring an uninterrupted power supply during blackouts.

- Flexible installation, supporting embedded and wall-mounted setups.
- Comprehensive power management, connecting to the grid, PV, battery and generators simultaneously.
- Four backup circuits with each capable of delivering up to 5 kW output for customized home loads.

Unparalleled Installation Experience 01

- **Wire-Free Connection:**

  Benefit from wire-free connections with BMS to battery and battery to battery, not only ensuring a quick and effortless installation but also saving on wire costs.

- **Effortless Configuration:**

  Auto identify and allocate the ID Address, which simplifies the process by automatically detecting and identifying new devices.

- **Versatile Battery Customization and Scalability:**

  Unlock the flexibility to tailor battery units from 5-15 kWh per BMS module, and seamlessly scale up to 45 kWh per inverter. Achieve a maximum household capacity of 90 kWh (with power guardian) , providing personalized energy solutions with ease.

Proactive Power Safety Shield 02

- **DC Arc Protection:**

  Built-in DC Arc Fault Sensor prevents fire hazards caused by DC Arc.

- **Insulation Monitoring:**

  PV Insulation Resistance Sensor to reduce potential safety risks.

- **Leakage Protection:**

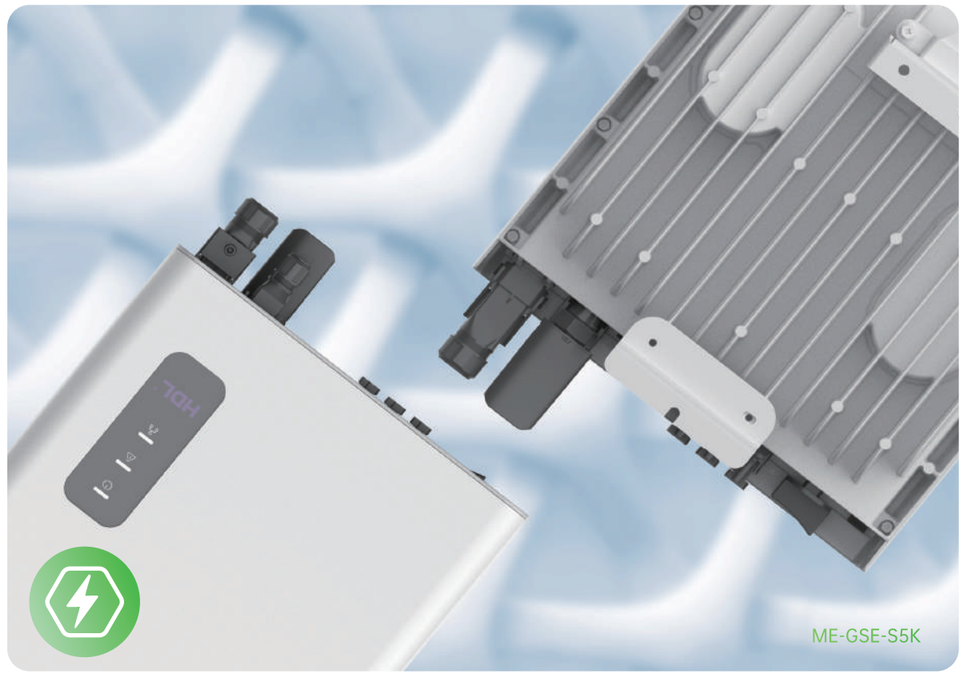
  The Type B leakage Current Sensor provides protection against electric shocks from PV insulation damage.

- **SunSpec Rapid Shutdown:**

  Enhance safety with SunSpec Rapid Shutdown. PV panel can be discharged quickly, so technicians can work safely during maintenance.

- **24/7 Real-time Monitoring:**

  Integrated sensors provide ongoing tracking of voltage, current, and temperature, ensuring system safety around the clock.



More Adaptive Design

03

- **Robust Performance up to 4000m:**

  Sustaining 100% of rated power at altitudes up to 4000m, far surpassing output reductions seen in similar products above 2000m.

- **Versatile Operation Environment:**

  Designed to operate between -20 to 50 ℃ with an IP65 waterproof rating, ensuring seamless functionality for both indoor and outdoor installations.

- **Compact Size:**

  Our compact battery unit occupies a minimal size, measuring just 0.13 ㎡.

EffiBoost Power Conversion

04

- **Inverter Max. Efficiency:**

  Elevate performance with inverter efficiency peaking at 97.6%, ensuring optimal power utilization.

- **Innovative Conversion Technology:**

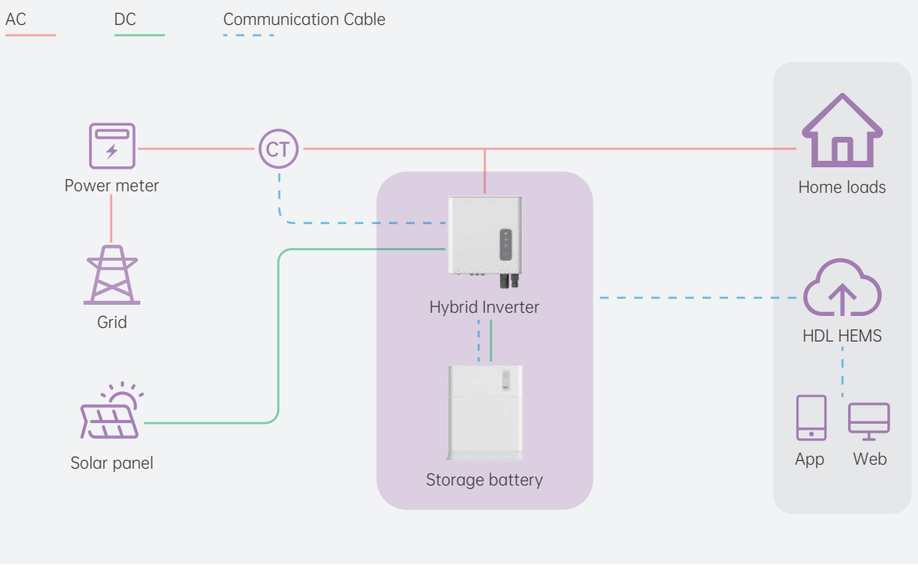
  Unmatched 99.2% DC to DC Conversion Efficiency.

- **Optimized MPPT Efficiency:**

  Leverage maximum solar power with a superior MPPT efficiency exceeding 99.9%.

On-grid Energy Storage Solution

Tailored for regions with abundant sunlight, stable power supply, and supporting grid-selling, this solution is a versatile and effective means of harnessing solar power.



Minimal Investment, Maximum Returns:

Achieve long-term solar power utilization with minimal investment—requiring only the cost of inverters and components. Enjoy sustained photovoltaic electricity generation and earn revenue from grid-selling, significantly reducing the payback period.

Self-Use:

Power all household needs exclusively from solar, minimizing reliance on the grid.

Surplus Power Grid Connection:

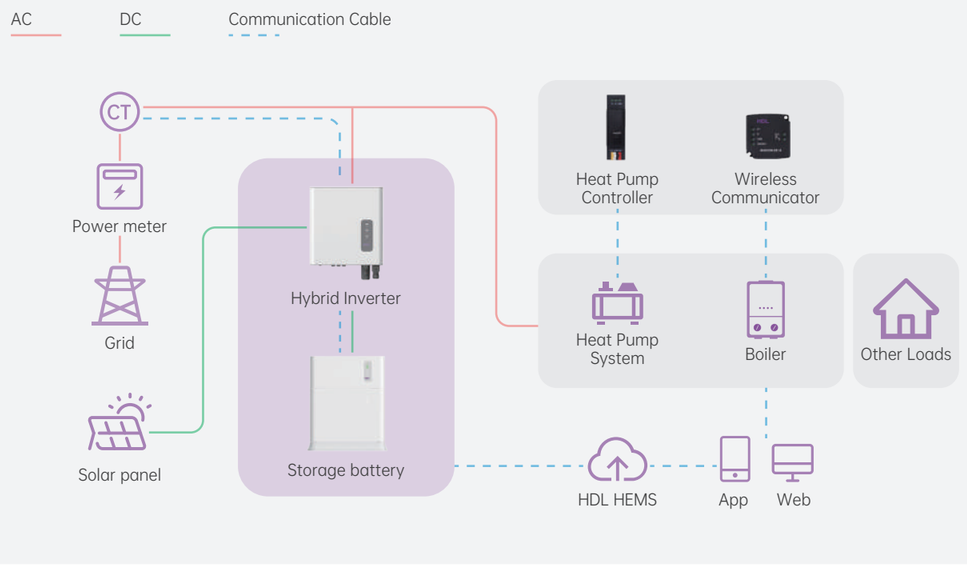
Automatically sell surplus solar energy to the grid, generating additional income.

Full Grid Connection:

Designed to sell all generated solar power to the grid for economic benefit, optimizing revenue generation.

Hybrid Energy Storage Solution

Tailored for regions with ample sunlight, stable power supply, and a demand for heating, this hybrid solution stores energy through the boiler system and battery.



Budget-Friendly Innovation:

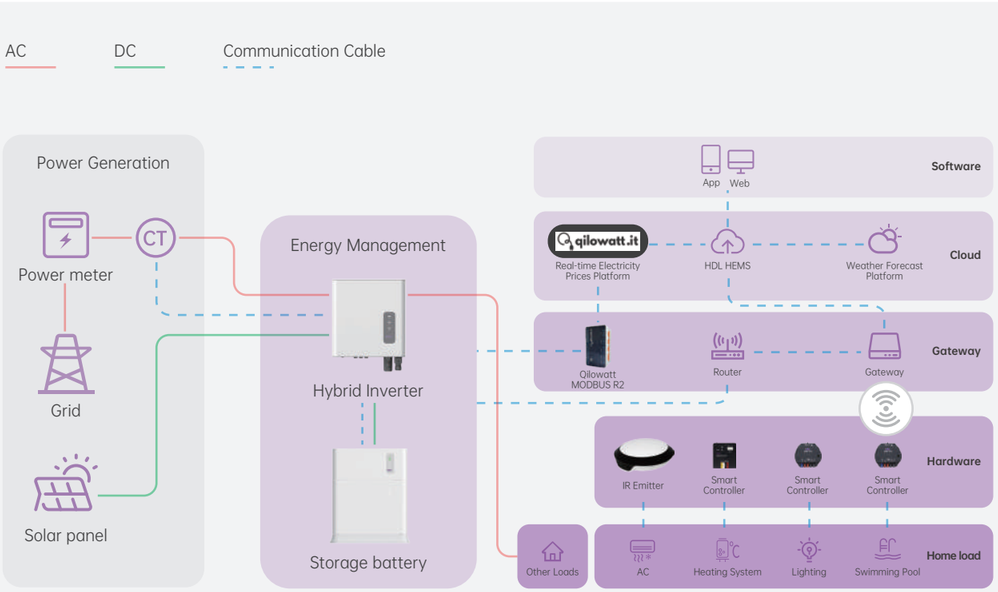
Customized for budget-conscious users looking for a PV energy storage system, it reduces extra battery expenses by utilizing the household water boiler as an energy storage tool, diminishing the need for multiple batteries, thus making the energy storage system more affordable than ever before.
Prioritizing daytime solar power for household needs and battery charge, surplus energy efficiently heats the boiler.
According to our research. heating a 200L water boiler by 5 degrees stores 1.1 kWh of energy, while a 1000L boiler heated by 10 degrees stores 11 kWh.

Off-Peak Charging and Heating:

Proactively charge the batteries during off-peak electricity rates, simultaneously heating the boiler. This strategic approach reduces energy consumption during peak hours, minimizing electricity costs.

On-grid Smart Home Solution

Tailored for those who lives in regions with ample sunlight, stable power supply, and spend much on heating, this system stands out with its intelligent features, setting it apart from conventional solutions. Empowered by real-time electricity prices platform and weather forecast platform, it offers users an unprecedented level of control, ensuring maximum cost-saving benefits by intelligently managing electricity consumption, storage, and sales.

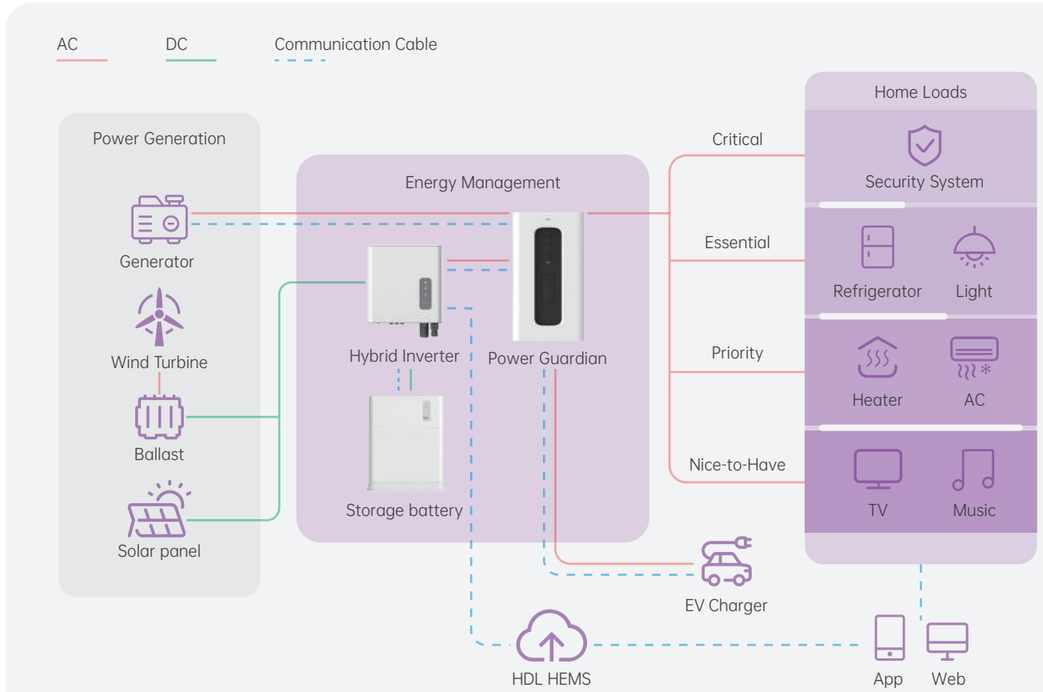


Adding intelligence to your system to maximize benefits:

Integrated with smart home system, real-time electricity prices platform and weather forecast platform, the system automatically controls the battery to buy or charge during the lowest rates and sell or discharge during the highest rates. Additionally, it proactively heats the boiler and swimming pool during times of lowest rates while intelligently switching home loads to energy-saving mode during high-rate periods. When adverse weather is forecasted, the system prioritizes charging on sunny days or during off-peak hours to reserve enough energy for emergency use.

Optimal Off-grid Energy Solution

Tailored for regions with unstable power supply, this solution, managed by the innovative Power Guardian, extends battery runtime by at least 40% compared with conventional solutions. Seamless transition to the generator ensures an uninterrupted power supply when the battery runs low.



Uninterrupted power with Power Guardian:

This solution was designed to provide an uninterrupted power supply for customers who often suffer black-outs, we use Power Guardian to manage all energy sources, like PV, wind, grid, battery and generator, while prioritizing home loads. During blackouts, it intuitively conserves energy by prioritizing critical devices, like security system, and shutting non-essential loads such as music and TV, to prolong your battery runtime by at least 40%. This extended runtime allows you to invest in fewer batteries, significantly lowering your overall equipment costs.

In our upcoming version, the Power Guardian's innovation extends to EV integration, empowering you to charge your electric vehicle through the same system or utilize your EV to support home loads seamlessly.

Technical Parameters

BMS Control Module

Model	ME-GSE-BMS15K

- **Charge Mode:**

Input Voltage Range	360~1000V
Max.Input Current	20A
Output Voltage Range	200~900V
Max.Output Current	10A

- **Discharge Mode:**

Input Voltage Range	200-876V
Max.Input Current	10A
Output Voltage Range	360~1000V
Max.Output Current	20A
Protection degree	IP65
Operating Temperature Range	-20℃~+60℃
Protection Class	I
Weight	21.4kg
Dimension	588*184*195mm

Power Guardian

Dimension	280 * 500 * 110mm
Max. Output Rated Power	10kW
Relay Number	4
Max. Output Rated Power for per relay	5kW

Battery Unit

Model	ME-GSE-B5K
Battery Type	LiFePO4
Nominal Voltage	256V
Rated Energy	5.12kWh
Rated Capacity	20Ah
Operating Ambient	0℃~+50℃(Charging)
Temperature	-10℃~+50℃(Discharging)
Operation Voltage Range	224-280V
Maximum Discharge Current	20A
Maximum Discharge Power	5.12kW
Maximum Charge Current	10A
Maximum Charge Power	2.5kW
Dimension	588*422mm
Net Weight	49kg
Protection Degree	IP65
Protection Class	I

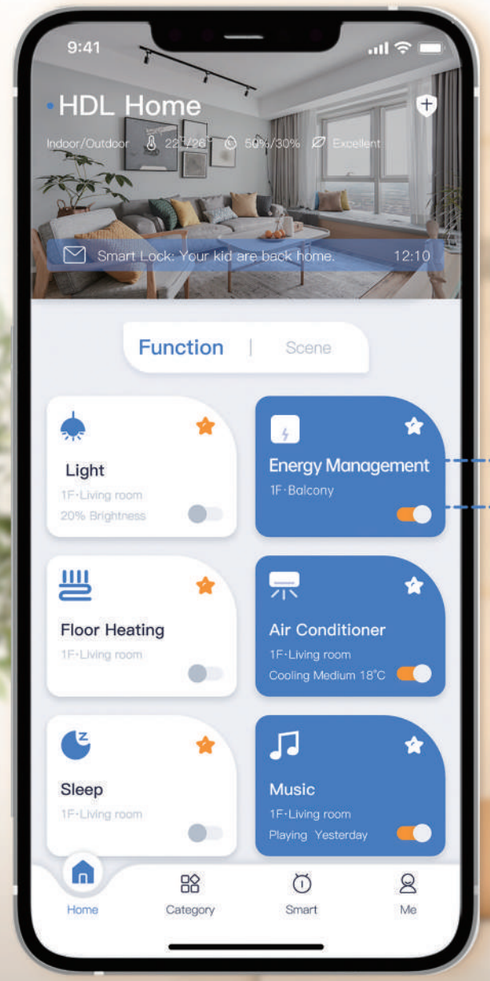
Single Phase Hybrid Inverter

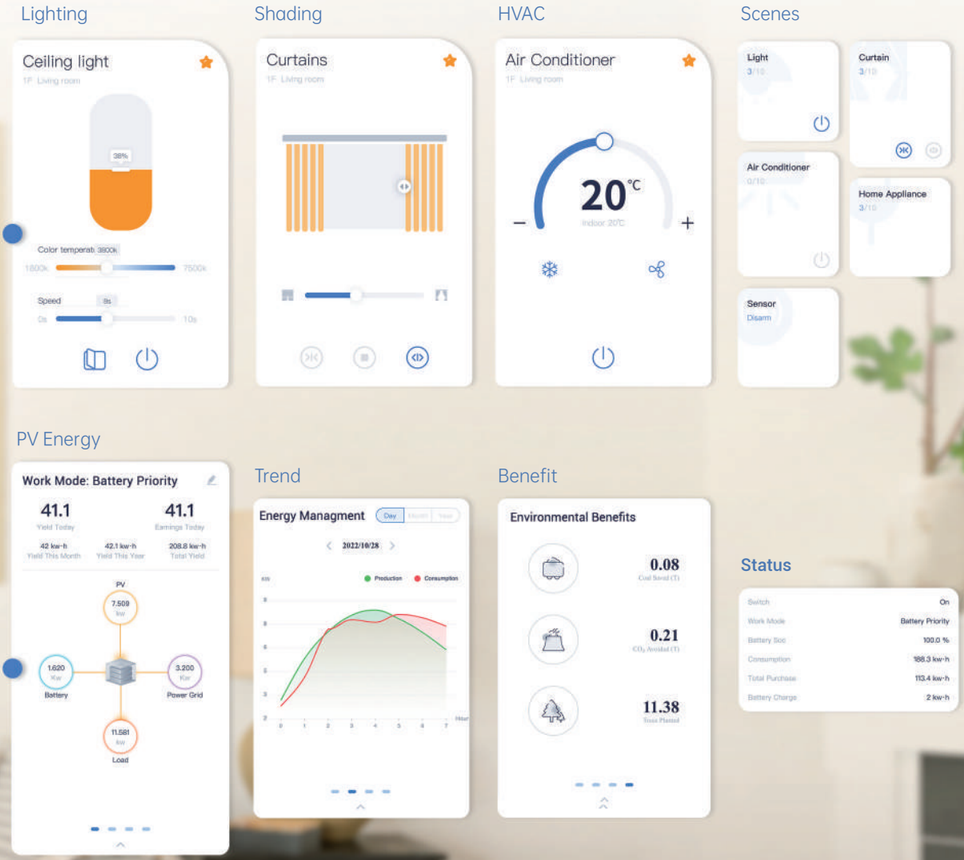
Model	ME-GSE-S5K
Max.PV Input Voltage	560V
Max.PV Input Current	13A/13A
MPPT Voltage Range	90-550V
Isc PV	18A/18A
Battery Type	Li-ion
Battery Nominal Voltage	380V
Battery Voltage Range	360-550V
a.c. Output Nominal Voltage	220/230/240V
a.c. Nominal Operating Frequency	50/60Hz
a.c. Output Rated Power	5kW
a.c. Output Max. Current	22.7 A
Power Factor	0.85(lagging)~0.85(leading)
Operating Temperature Range	-25℃~+60℃
Inverter Topology	Non-Isolation
Dimension	376*145*396mm
Weight	16kg
Protection Degree	IP65
Protection Class	I

Intelligent Control with HDL On Pro

The app enables users to manage their electric energy generation, sales, storage and consumption at one terminal.

With real-time monitoring of energy reserve and device consumption, it helps to optimize electricity usage with accurate control through a single app. What's more, On Pro allows users to track and visualize the reduction in their carbon footprint and other environmental metrics, such as greenhouse gas emissions and energy consumption.





Unified entrance

Convenient viewing

Real-time monitoring

Centralized control